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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,096

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Stephen Privett

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DES MOINES, IA 50309-2721

EXAMINER

PAUL, DISLER

ART UNIT

PAPER NUMBER

2614

NOTIFICATION DATE

DELIVERY MODE

09/17/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patatty@ipmvs.com

Office Action Summary	Application No. 10/553,096	Applicant(s) PRIVETT, STEPHEN	
	Examiner DISLER PAUL	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

In response to the applicant's amended claim that audio system including "the amplifier arrangement being provided for each of the speakers" as in regard to independent claim

1.

It is noted that the prior art of record does disclose of provided an amplifier arranged for the speakers (col.4 line 30-55), thus, while Curtis failed to disclose that the audio system including an amplifier arrangement provided for each of the speakers. However, it would have been obvious for one of the ordinary skills in the art to have substituted the amplifier arrangement for the speakers as disclosed for implementing the amplifier arrangement provided for each of the speakers if desired with predictable result **so as to generate and amplified audio signals over selected speakers per room location.**

Furthermore, the applicant argued that "the amplifier comprising: a switching regulator and a switching amplifier; switching regulator is arranged to receive a variable DC electrical input from the power supply and output a substantially constant voltage to the switching amplifier" as found in the secondary reference (Kemmerer et al.) would not have been combinable with the primary reference.

Such argument has been further considered and is persuasive.

Since, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, the secondary reference as in Kemmerer et al. disclose of an amplifier arrangement comprising a switching regulator and a switching amplifier; switching regulator is arranged to receive a variable DC electrical input from a power supply and output a substantially constant voltage to the switching amplifier so as to provide a reduced power consumption during a sound adjustment process and thereby avoiding to damage the audio device as found (in the specification of the Kimmerer's reference).

After, Further consideration and examination, the examiner has found the amended claims to be unpatentable over prior arts.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-8 are rejected under 35 U.S.C. 103(a) as being Unpatentable over Curtis et al. (US 6,389,139 B1) and Kemmerer et al. (US 2003/0123678 A1).

Re claim 1, Curtis disclose of a distribute audio system for use in different rooms of a premises including a plurality of speakers adapted for location in different rooms of a premises, a power supply at a location in the premises and an amplifier arrangement provided for the speakers and located intermediate said power supply and each of said speakers (fig.1 (14; 16,42,44); fig.7 (14; 16, 42, 44); col.1 line 15-20; col.3 line 26-30; col.4 line 41-47/the speakers (42; 44) being provided **in different rooms of a premises** and having a power amplifier (14) intermediate the power supply and the speakers).

However, Curtis failed to disclose that the audio system including an amplifier arrangement provided for each of the speakers. However, it would have been obvious for one of the ordinary skills in the art to have substituted the amplifier arrangement for the speakers as disclosed for implementing the amplifier arrangement provided for each of the speakers if desired with predictable result so as to generate and amplified audio signals over selected speakers per room location.

Curtis further disclose of each of the amplifier arrangement comprising: m, an audio input, an audio output; said power supply being arranged remotely of said amplifier arrangement and wherein said system is configured so that the said power supply is directly connected to the plurality of said amplifier arrangements via respective cable (fig.1 (16, 14); fig.7 (16, 16a, 14);

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fig.5A (6, 16; 14); col.3 line 30-40; col.4 line 30-67; col.11 line 11-25; col.8 line 50-60 /the power supply (16) may be used to provide power to the plurality of amplifier arrangements (16) in the plurality of rooms and the system may also include a second amplifier being remote from the power supply) and wherein said amplifier arrangement are respectively located in different rooms of a premises (see examiner argument above with amplifier arrangement per speaker in different location).

However, Curtis failed to disclose that the audio system having an amplifier arrangement comprising a switching regulator and a switching amplifier; switching regulator is arranged to receive a variable DC electrical input from the power supply and output a substantially constant voltage to the switching amplifier.

But, Kemmerer et al. disclose of an audio system having an amplifier arrangement comprising: a switching regulator and a switching amplifier; switching regulator is arranged to receive a variable DC electrical input from a power supply and output a substantially constant voltage to the switching amplifier (fig.2 (Battery; 42, 44, 2, 4); par [0035-0036; 0055]/the switching regulator receive variable DC input and provide constant voltage to the switching amplifier). Thus, it would have been obvious for one of the ordinary skill in the art to have modified the prior art with adding audio system having an amplifier arrangement comprising a switching regulator and a switching amplifier; switching regulator is arranged to receive a variable DC electrical

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input from a power supply and output a substantially constant voltage to the switching amplifier so as to provide a reduced power consumption during a sound adjustment process and thereby avoiding to damage the audio device.

The combined teaching of **Curtis and Kemmerer et al.** as a whole, further disclose of the amplifier arrangement as being located within a certain range remotely from the said power supply location (fig.1 (16, 14); col.4 line 30-55; col.11 line 22-30/the power supply with conditioner (16) may be remotely connected to the amplifier (14)).

But, the combined teaching of **Curtis and Kemmerer et al.** as a whole, failed to disclose that the amplifier can located within a ranged up to 50 meters from the power supply location.

But, it would have been obvious for one of the ordinary skills in the art to have tried in modifying the amplifier which can located within a certain distance range form the power supply as disclosed by implementing the specific that the amplifier can located within a ranged up to 50 meters from the power supply location which produced no unexpected result which is merely an obvious variation of the engineering preference.

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Re claim 2, the audio system according to claim 1, wherein the switching amplifier is a digital amplifier (fig.1 (2); par [0031]).

Re claim 4, audio system according claim 2, wherein the circuitry of either the switching regulator and/or the switching amplifier is constructed of discrete components (fig.2 (2a, 2b, 2c); par [0059]).

Re claim 5, the audio system according to claim 4, the combined teaching of **Curtis and Kemmerer** et al. as a whole, would have taught of such specific wherein the switching amplifier processes at least two channels of audio input (fig.1 (20)/ switching amplifier within the amplifier arrangement (16) having multi-channel audio input signal).

Re claim 6, the audio system according to claim 5, but, the combined teaching of **Curtis and Kemmerer** et al. as a whole, fail to disclose of further including an auxiliary control device, e.g. to control the audio output volume.

But, Kemmerer disclose of a system wherein such further including an auxiliary control device, e.g. to control the audio output volume (Kemmerer, par [0009-0010]/remote control receiver may be used) so as to control the audio output signal from a distant remote location. Thus, it would have been obvious for one of the ordinary skill in the art to have modified the prior art with implementing the auxiliary

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control device, e.g. to control the audio output volume so as to control the audio output signal from a distant remote location.

Re claim 8, the audio system according to claim 1, wherein the power supply is connectable to the remote amplifier arrangement via a wiring cable of a certain length (fig.1 (16, 20); col.8 line 40-50; col.11 line 22-30 & 11-25/the power supply (14) may be remotely connected to the amplifier arrangement (16)).

But, the combined teaching of **Curtis and Kemmerer et al.** as a whole, failed to disclose that the power supply is connectable to the amplifier arrangement which varies in length between a preselected maximum e.g.50m, and a preselected minimum, e.g. 1m.

Similarly, it would have been obvious for one of the ordinary skill in the art to have tried in having such remote power supply with connection to the amplifier arrangement as disclosed by incorporating the specific wherein the power supply is connectable to the amplifier arrangement which varies in length between a preselected maximum e.g.50m, and a preselected minimum, e.g. 1m. which produce no unexpected result based on the obvious variation of the engineering design.

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Re claim 7, the audio system according to claim 6, wherein the switching regulator and the switching amplifier are being housed in a certain housing (fig.2 (2,4)). However, the combined teaching of Curtis et al. and Kemmerer et al as a whole, failed to teach of the specific wherein the switching regulator and the switching amplifier are being housed in a single housing. But, it would have been obvious for one of the ordinary skills in the art to have tried in modifying the such switching regulator and switching amplifier as being housed in a certain housing with further implementing such adjustment wherein the switching regulator and the switching amplifier are being housed in a single housing with no unexpected result based on the obvious variation of engineering design.

5. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis et al. (US 6,389,139 B1) and Kemmerer et al. (US 2003/0123678 A1) and further in view of Pearce et al. (US 5,973,368).

Re claim 3, the audio system according to claim 2 with the switching amplifier , However, the combined teaching of Curtis et al. and Kemmerer et al. as whole, fail to disclose of the specific wherein the switching amplifier is a class D digital amplifier with associated H-bridge circuit on the output stage. But, Pearce et al. disclose of an audio amplifier wherein the switching amplifier is a class D digital amplifier with associated H-bridge circuit on the output stage (fig.1F-G; col.6 line 35-65; col.13 line 35-47) for purpose of driving the speaker with the low voltage audio signal. Thus, it would have

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been obvious for one of the ordinary skill in the art to have modified the prior art as combined with implementing the audio amplifier wherein the switching amplifier is a class D digital amplifier with associated H-bridge circuit on the output stage for purpose of driving the speaker with the low voltage audio signal.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DISLER PAUL whose telephone number is (571)270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. P./

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Examiner, Art Unit 2614

/Devona E. Faulk/

Primary Examiner, Art Unit 2614